**EIC 2100** 

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Alyson Dill, EIC 2100 Team Leader 272-3527, RND 4B28

Voluntary Results Feedback Form								
> I am an examiner in Workgroup: Example: 2133								
<ul> <li>➢ Relevant prior art found, search results used as follows:         <ul> <li>102 rejection</li> <li>103 rejection</li> <li>Cited as being of interest.</li> <li>Helped examiner better understand the invention.</li> <li>Helped examiner better understand the state of the art in their technology.</li> <li>Types of relevant prior art found:</li> <li>Types of relevant prior art found:</li></ul></li></ul>								
<ul> <li>☐ Foreign Patent(s)</li> <li>☐ Non-Patent Literature         <ul> <li>(Journal articles, conference proceedings, new product announcements etc.)</li> </ul> </li> </ul>								
Relevant prior art not found:								
☐ Results verified the lack of relevant prior art (helped determine patentability).								
Results were not useful in determining patentability or understanding the invention.								
Comments:								
Drop off or send completed forms to STIC/EIC2100 RND, 4B28								



Access DB# 192925

## SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: Ali Abyonel Examiner #: 80755 Date: 6-14-06										
Art Unit: 3137 Phone Number 30 7961 Serial Number: 10086208										
Mail Box and Bldg/Room Location: 2865 Results Format Preferred (circle) PAPER DISK E-MAIL										
If more than one search is submitted, please prioritize searches in order of need.										
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.										
Title of Invention: System and Methods for Obtaining Digital Signatures on a Single Authorative										
Title of Invention: System and Methods for Obtaining Digital Signatures on a Single Authorative Copy of an Original electronic record  Inventors (please provide full names): DScott G. Ainsworth 2 Hacharles F. Hawking 3 Doneld J. Pastor										
Earliest Priority Filing Date: 11-26-61										
*For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.										
The invention is related to Maintaining Control of an electron										
record (electronic document), which Provides a secure										
electronic transaction. I have searched class 713/155,181.										
References used are US patent \$ 5,748,738 and 6,212,281.										
DECEIVED 1 JUN 1 4 2006										
BY. Alt										

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER

```
File 88:Gale Group Business A.R.T.S. 1976-2006/Jun 08
          (c) 2006 The Gale Group
 File 369: New Scientist 1994-2006/Jun W2
          (c) 2006 Reed Business Information Ltd.
File 160:Gale Group PROMT(R) 1972-1989
          (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2006/Jun 16
          (c) 2006 ProQuest Info&Learning
     15:ABI/Inform(R) 1971-2006/Jun 16
          (c) 2006 ProQuest Info&Learning
File
      16:Gale Group PROMT(R) 1990-2006/Jun 15
          (c) 2006 The Gale Group
File
       9:Business & Industry(R) Jul/1994-2006/Jun 15
          (c) 2006 The Gale Group
File
      13:BAMP 2006/Jun W1
          (c) 2006 The Gale Group
File 810:Business Wire 1986-1999/Feb 28
          (c) 1999 Business Wire
File 610: Business Wire 1999-2006/Jun 16
          (c) 2006 Business Wire.
File 647:CMP Computer Fulltext 1988-2006/Jul W3
          (c) 2006 CMP Media, LLC
File
      98:General Sci Abs 1984-2005/Jan
          (c) 2006 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2006/Jun 16
          (c) 2006 The Gale Group
File 634:San Jose Mercury Jun 1985-2006/Jun 15
         (c) 2006 San Jose Mercury News
File 275: Gale Group Computer DB(TM) 1983-2006/Jun 15
         (c) 2006 The Gale Group
File
      47:Gale Group Magazine DB(TM) 1959-2006/Jun 16
         (c) 2006 The Gale group
File
      75:TGG Management Contents(R) 86-2006/Jun W1
         (c) 2006 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2006/Jun 15
         (c) 2006 The Gale Group
File 624:McGraw-Hill Publications 1985-2006/Jun 16
         (c) 2006 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2006/Jun W2
         (c) 2006 ProQuest
File 613:PR Newswire 1999-2006/Jun 16
         (c) 2006 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 141:Readers Guide 1983-2006/Feb
         (c) 2006 The HW Wilson Co
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 696:DIALOG Telecom. Newsletters 1995-2006/Jun 15
         (c) 2006 Dialog
File 553: Wilson Bus. Abs. 1982-2006/Jun
         (c) 2006 The HW Wilson Co
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Jun 16
         (c) 2006 The Gale Group
File 674:Computer News Fulltext 1989-2006/Jun W2
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S6
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S7
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S8
       118166
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S14
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S15
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S16
                S15 NOT S12
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S17
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           94
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                S6(10N)S8 OR S7
S20
           58
                S19 (100N) S1
S21
           28
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S22
           12
                S21 NOT PY=2002:2006
S23
           14
                (S1 OR S6) (100N) S9
S24
           13
                RD (unique items)
                S24 NOT PY=2002:2006
S25
           10
                S5(3N)(PARTIAL?? OR INCOMPLETE?? OR UMCOMPLETE?? OR "NOT"(-
S26
          117
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S29
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S30
S31
                S30 NOT PY=2002:2006
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17/3,K/5 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2006 The Gale Group. All rts. reserv.

06950199 Supplier Number: 58662652 (USE FORMAT 7 FOR FULLTEXT) ValiCert Demonstrates Next Wave in E-Commerce With Digital Receipts. PR Newswire, p5021

Jan 19, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 613

and offer comprehensive dispute resolution capabilities. XML-based digital receipts generated for each transaction are **digitally signed**, timestamped and verified using the ValiCert Receipt Notary(TM) and sent to the ValiCert Receipt Vault(TM) for **secure** archival. ValiCert's technology provides authenticated delivery of the digital receipt, verifying the sender and...

...modified since being transmitted.

About Digital Receipts

The digital receipt is a convenient and friendly **digital document** consumers, businesses, retailers, banks and software companies can use to securely send and receive information...

17/3,K/12 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c) 2006 The Gale Group. All rts. reserv.

12296419 SUPPLIER NUMBER: 62657568 (USE FORMAT 7 OR 9 FOR FULL TEXT) Welcome to a paperless world.

Jessop, David

Banker, 150, 891, 98

May, 2000

ISSN: 0005-5395 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1320 LINE COUNT: 00117

... legal environment for dematerialised trade.

Bolero.net acts as a neutral third party to ensure **secure** delivery and **receipt** of information and provides a unique legal structure that binds all users together. Key components...

...around the world.

- \* Bolero.net has been established with up-to-date cryptographic technology incorporating **digital signatures** that cannot be changed and permit only authorised access.
  - \* Concerns over security are alleviated by ...

...Swift provides guaranteed delivery and, with users required to sign up to the rule book, **electronic documents** sent through the service are contractually binding. In addition, using bolero.net compares favourably with...

```
File
        2:INSPEC 1898-2006/Jun W1
          (c) 2006 Institution of Electrical Engineers
        6:NTIS 1964-2006/Jun W1
File
          (c) 2006 NTIS, Intl Cpyrght All Rights Res
        8:Ei Compendex(R) 1970-2006/Jun W1
File
          (c) 2006 Elsevier Eng. Info. Inc.
      23:CSA Technology Research Database 1963-2006/Jun
File
          (c) 2006 CSA.
File
      34:SciSearch(R) Cited Ref Sci 1990-2006/Jun W2
          (c) 2006 Inst for Sci Info
File
      35: Dissertation Abs Online 1861-2006/May
          (c) 2006 ProQuest Info&Learning
File
      65: Inside Conferences 1993-2006/Jun 16
          (c) 2006 BLDSC all rts. reserv.
File
      94:JICST-EPlus 1985-2006/Mar W2
          (c) 2006 Japan Science and Tech Corp(JST)
File
      95:TEME-Technology & Management 1989-2006/Jun W2
          (c) 2006 FIZ TECHNIK
      99:Wilson Appl. Sci & Tech Abs 1983-2006/May
File
          (c) 2006 The HW Wilson Co.
File 111:TGG Natl.Newspaper Index(SM) 1979-2006/Jun 07
          (c) 2006 The Gale Group
File 144: Pascal 1973-2006/May W3
          (c) 2006 INIST/CNRS
File 239:Mathsci 1940-2006/Jul
          (c) 2006 American Mathematical Society
File 256:TecInfoSource 82-2006/Jul
          (c) 2006 Info. Sources Inc
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
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        24733
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        19922
             N? ? OR SIGNING OR SIGNED)
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S8
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             MOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE)
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              OR UNCOMPLETE? ? OR .NOT. () COMPLETE? ? OR FRACTION?? OR HALF
             OR HALFWAY OR SECTION??)
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S12
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S13
            6
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S14
            2
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S16
           12
                RD (unique items)
S17
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S18
           8
                S17 NOT PY=2002:2006
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S20
           36
                S6(10N)S8 OR S7
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S21
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                RD (unique items)
                S21 NOT PY=2002:2006
S22
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S23
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                (S1 OR S6) AND S3
S24
          13
                S23 AND S5
S25
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                S25 NOT (S13 OR S17 OR S21)
S26
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S27
                S26 NOT PY=2002:2006
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S28
           13
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S29
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            ) COMPLETE OR FRACTION?? OR HALF OR HALFWAY)
S32
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S33
           20
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S34
           19
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S35
           16
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14/5/2 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

04371018 E.I. No: EIP96043118174

Title: Non-repudiation with mandatory proof of receipt

Author: Coffey, Tom; Saidha, Puneet

Corporate Source: Univ of Limerick, Limerick, Irel

Source: Computer Communication Review v 26 n 1 Jan 1996. p 6-17

Publication Year: 1996

CODEN: CCRED2 ISSN: 0146-4833

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9605W4

Abstract: Non-repudiation allows an exchange of data between two principals in such a manner that the principals cannot subsequently deny their participation in the exchange. Current non-repudiation schemes, while providing a mandatory proof of origin service, generally provide only discretionary proof of receipt since it is difficult to enforce the return of the proof of receipt by the recipient. In this paper a new scheme for achieving mandatory mutual non-repudiation is proposed, encompassing both mandatory proof of origin and mandatory proof of receipt. The fundamental feature of the scheme is that the proofs of origin and receipt are not exchanged until both principals have submitted their digitally evidence to a trusted third party intermediary. This ensures that if the non-repudiation protocol is not completed, neither principal can gain from the exchange. An added advantage is that the process of dispute arbitration is considerably simplified since a small number of rules are required to decide whether an alleged data exchange took place. (Author abstract) 10 Refs.

Descriptors: \*Data communication systems; Computer networks; Network protocols; Digital signal processing; Security of data; Cryptography Identifiers: Mandatory proof of receipt; Public key cryptography; Security protocols; Dispute arbitration; Non-repudiation Classification Codes:

722.3 (Data Communication, Equipment & Techniques); 723.2 (Data Processing)

722 (Computer Hardware); 723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

22/5/12 (Item 1 from file: 111)

DIALOG(R)File 111:TGG Natl.Newspaper Index(SM) (c) 2006 The Gale Group. All rts. reserv.

05059145 Supplier Number: 19060535

Multi-Card Accelerator from SPYRUS is Hardware Cryptographic Digital Signature Server Solution; Scaleable, High-Assurance Certification Authority, Remote Access, and Other Digital Content Signing Applications Now Enabled.

Business Wire, p1270231

Jan 27, 1997

3 1 . i

LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Spyrus Inc. -- Product introduction

DESCRIPTORS: Computer peripherals industry--Product introduction

PRODUCT NAMES: 3573290 (Computer Peripherals NEC)
SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified

FILE SEGMENT: NW File 649

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File 348: EUROPEAN PATENTS 1978-2006/ 200623
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060608,UT=20060601
         (c) 2006 WIPO/Univentio
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI. All rts. reserv.
Set
                Description
S1
        61166
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S3
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S18
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S24
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S25
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S26
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S27
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                S15 NOT (S9 OR S17 OR S21 OR S19 OR S24)
S28
           23
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S27 AND IC=(G06F OR H04L)

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File 348: EUROPEAN PATENTS 1978-2006/ 200623
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060615,UT=20060608
         (c) 2006 WIPO/Univentio
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI. All rts. reserv.
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              CONFIRM??? OR CONFIRMATION? ?)
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S8
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S17
                S16 NOT (S10 OR S11)
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21/3,K/6
             (Item 3 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
 (c) 2006 WIPO/Univentio. All rts. reserv.
00561873
            **Image available**
METHOD AND APPARATUS FOR ESTABLISHING ELECTRONIC TRANSACTIONS
PROCEDE ET APPAREIL POUR EFFECTUER DES TRANSACTIONS ELECTRONIQUES
Patent Applicant/Assignee:
  RECEIPT COM INC,
Inventor(s):
  JEVANS David,
Patent and Priority Information (Country, Number, Date):
  Patent:
                        WO 200025246 Al 20000504 (WO 0025246)
  Application:
                        WO 99US24635 19991020 (PCT/WO US9924635)
  Priority Application: US 98105778 19981027; US 98223678 19981230
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD
  GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
  MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN
  YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
  BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA
  GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 12827
Fulltext Availability:
  Detailed Description
Detailed Description
... generated by the Issuer. The Data Definition 50 may also include
  indexing "hooks" for associating electronic transaction documents
  with a Transaction ID, and for associating them with one another in
  sequential relationship (i...
...the Internal Representation 52 may be made without departing from the
  spirit of the invention.
  Document Type Definition for Electronic Transaction Document
  class Digital Receipt
  <?xml version = "1.0"?>
  <!DOCTYPE digital-receipt
 <!-- List of the ELEMENTS (contents) of a Digital Receipt
 <!-- The root element of a receipt document -->
 <!-- NOTE that the digital signature (s) are appended to the
 receipt
 <!--
  they cannot be described in the XML definition because they
 are generated -->
 <!-- '
  from a document...
...receipts
 <!ATTLIST re-ceipt
 ID id ID #REQUIRED>
 ]> <!-- end of DOCTYPE receipt -->
 <!-- Example of a Electronic Transaction Document Body -->
```

26/3,K/5 (Item 1 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* 00939695

SYSTEM AND METHOD OF USER AND DATA VERIFICATION

SYSTEME ET PROCEDE DE VERIFICATION D'UTILISATEUR ET DE DONNEES

Patent Applicant/Inventor:

BRANDYS Pascal, 1401 Camino del Mar, Suite 202, Del Mar, CA 92014, US, US (Residence), US (Nationality)

Legal Representative:

HUNT Dale C (agent), Knobbe, Martens, Olson & Bear, LLP, 16th Floor, 620 Newport Center Drive, Newport Beach, CA 92660, US,

Patent and Priority Information (Country, Number, Date):

WO 200273877 A2-A3 20020919 (WO 0273877) WO 2002US7517 20020311 (PCT/WO US0207517)

Application: Priority Application: US 2001274518 20010309

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM DZ EC EE (utility model) EE ES FI (utility model) FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK (utility model) SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 6198

Fulltext Availability: Claims

... successful, generating a digital signature for a message, wherein the digital signature includes an encrypted message digest of the message, and wherein the digital signature is encrypted, at least in part, using the generated private key; and transmitting the generated digital signature to a remote electronic device.

20 The method of Claim 19, wherein the digital signature is transmitted with the ...

```
10/3,K/19
              (Item 5 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2006 WIPO/Univentio. All rts. reserv.
00939235
            **Image available**
SYSTEM AND METHOD FOR PROVIDING SECURE TRANSACTIONS
SYSTEME ET PROCEDE PERMETTANT DE FOURNIR DES TRANSACTIONS SECURISEES
Patent Applicant/Assignee:
  GEOTRUST INC, 115 SW Ash, Portland, OR 97204, US, -- (Residence), US
    (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
  ROSENBERG Jonathan B, Auburndale, MA, US, US (Residence), US
    (Nationality), (Designated only for: US)
  CHEN David Y, Portland, OR, US, US (Residence), US (Nationality),
    (Designated only for: US)
  REMY David L, West Linn, OR, US, US (Residence), US (Nationality),
    (Designated only for: US)
  GARRICK Lucy, Portland, OR, US, US (Residence), US (Nationality),
    (Designated only for: US)
Legal Representative:
  CANNAVALE Stephen (agent), Goodwin Procter LLP, 7 Becker Farm Road,
    Roseland, NJ 07068, US,
Patent and Priority Information (Country, Number, Date):
  Patent:
                        WO 200273364 A2-A3 20020919 (WO 0273364)
  Application:
                        WO 2002US7657 20020312 (PCT/WO US0207657)
  Priority Application: US 2001275074 20010312
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
  SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 8764
Main International Patent Class (v7): G06F-017/60
International Patent Class (v7): G06F-011/00
Fulltext Availability:
  Detailed Description
Detailed Description
... to dispute
 resolution services based on a True Record.
 Whenever a Trust Authority digital signature is created or
  encountered by a TrustWatch user there is an option of
 transmitting this securely to a digital receipt vault. The
 digital receipt vault is a highly secure location that enables
 the Trust Administrator...
```

```
17/3,K/2
             (Item 2 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.
00799074
Method
                                digital signatures, for
                zero-knowledge
                                                               creating
    collision-resistant signature
Verfahren zur digitalen Unterschrift mit Null-Kenntnis, zum Herstellen von
    kollisionsresistenten Unterschriften
Procede de signature numerique a connaissance nulle, permettant d'elaborer
    une signature resistant aux collisions
PATENT ASSIGNEE:
  FRANCE TELECOM, (1334142), Etablissement autonome de droit public, 6,
    Place d'Alleray, 75015 Paris, (FR), (applicant designated states:
  LA POSTE, (1420723), 4, Quai du Point du Jour, F-92777 Boulogne
    Billancourt Cedex, (FR), (applicant designated states: DE;GB)
INVENTOR:
  Girault, Marc, Cabinet Ballot-Schmit, 9 Boulevard de Strasbourg, 83000
    Toulon, (FR)
LEGAL REPRESENTATIVE:
  Ballot, Paul Denis Jacques (39687), Cabinet Ballot-Schmit, 9, boulevard
    de Strasbourg, 83000 Toulon, (FR)
PATENT (CC, No, Kind, Date): EP 743775 A1 961120 (Basic)
                             EP 743775 B1 980114
APPLICATION (CC, No, Date): EP 96480053 960430;
PRIORITY (CC, No, Date): FR 956259 950517
DESIGNATED STATES: DE; GB
INTERNATIONAL PATENT CLASS (V7): H04L-009/32;
TRANSLATED ABSTRACT WORD COUNT:
ABSTRACT WORD COUNT: 128
LANGUAGE (Publication, Procedural, Application): French; French; French
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
                          9803
      CLAIMS B (English)
                                       714
                          9803
      CLAIMS B
               (German)
                                       691
      CLAIMS B
                 (French) 9803
                                       701
      SPEC B
                (French) 9803
                                      5524
Total word count - document A
                                       - 0
Total word count - document B
                                      7630
Total word count - documents A + B
                                      7630
```

- ...CLAIMS in that the said transformation stage (35) consists of combining one of the said first ( $\bf e$ ) and second (y) **signature** parameters with the said third parameter (g(M)).
- 6. A procedure according to any of...
- ...to which are input a commitment value (c) of a random value (r) and a **fraction** (h1) of a **hash** code (h(M)) given by a collision-resistant hash function (h) to which the message...

(c) 2006 JPO & JAPIO File 350:Derwent WPIX 1963-2006/UD, UM &UP=200637 (c) 2006 The Thomson Corp. Set Items Description S1 22421 (E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE)(3N)(R-ECORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ? S2 42143 AUTHENTICAT??? OR AUTHENTIC??? **S3** 51030 RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR CONFIRM??? OR CONFIRMATION? ?) (3N) (RECEIV??? OR SUBMIT???? OR SUBMISSION? ? OR INPUT????) S4 S3(3N) (APPEND??? OR PREPEND??? OR ATTACH??? OR CONCATENAT?-?? OR CONJOIN??? OR JOIN??? OR CONNECT???) **S**5 MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR 4342 ALGORITHM? ?) S6 200648 (E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIG-N???) S7 881 S6(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE) S8 8338 (USER? ? OR SIGNER? ? OR SIGNATOR??? OR PERSON? ?) (3N) (RE-MOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE) S9 S1(3N)S2 AND S4 1 S10 20 (S1 OR S6) AND S4 S11 19 S10 NOT S9 S12 16 S11 NOT AD=20011126:20031126/PR S13 1 4 S12 NOT AD=20031126:20060615/PR S14 10982 (E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIG-N? ? OR SIGNING OR SIGNED) S15 S14(3N) (REMOTE?? OR OFF()SITE? ? OR DISTANT?? OR DISTANCE) 66 S16 S1 AND S3 AND S15 1 S17 0 S16 NOT (S9 OR S11) S18 7 S1 AND S15 S19 6 S18 NOT (S9 OR S11) S20 3 S19 NOT AD=20011126:20031126/PR S21 91 S1 AND S5 AND S14 S22 5 S21 AND S3 S23 5 S22 NOT (S9 OR S11 OR S19) S24 S21 NOT (S9 OR S11 OR S19 OR S22) 86 S25 S24 NOT AD=20011126:20031126/PR 58 S26 S25 NOT AD=20031126:20060615/PR 49 S27 7 S26 AND SECURE S28 44 S1 AND S14 AND S3 S29 S28 NOT (S9 OR S11 OR S19 OR S22 OR S27) 37 S30 S29 NOT AD=20011126:20031126/PR 24 S31 S30 NOT AD=20031126:20060615/PR 20

S32 NOT (S9 OR S11 OR S19 OR S22 OR S27 OR S29)

S33 NOT AD=20011126:20031126/PR

S34 NOT AD=20031126:20060615/PR

File 347: JAPIO Dec 1976-2005/Dec (Updated 060404)

S32

S33

S34

S35

43

40

22

S14 AND S8

File 347: JAPIO Dec 1976-2005/Dec (Updated 060404) (c) 2006 JPO & JAPIO File 350: Derwent WPIX 1963-2006/UD, UM &UP=200637 (c) 2006 The Thomson Corp.

Set	Items	Description
S1	308552	RECEIPT? ? OR (PROOF OR ACKNOWLEDG??? OR ACKNOWLEDGEMENT OR
	(	CONFIRM??? OR CONFIRMATION? ?)
S2	2088	S1(3N)(INTERNAL?? OR SECUR??? OR INTRANET? ?)
S3	4342	MESSAGE()DIGEST? ? OR HASH??? OR ONE()WAY() (FUNCTION? ? OR
	A1	LGORITHM? ?)
S4	183	S3(3N) (PART OR PARTS OR PARTLY OR PARTIAL?? OR INCOMPLETE??
	(	OR UNCOMPLETE? ? OR .NOT.()COMPLETE? ? OR FRACTION?? OR HALF
	OF	R HALFWAY OR SECTION??)
S5	22421	(E OR ELECTRONIC OR DIGITAL?? OR ONLINE OR ON()LINE) (3N) (R-
	EC	CORD? ? OR DOCUMENT? ?) OR ERECORD? ? OR EDOCUMENT? ?
S6	10982	(E OR ELECTRONIC???? OR DIGITAL??) (3N) (SIGNATURE? ? OR SIG-
	N?	? ? OR SIGNING OR SIGNED)
S7	29	S2 AND S5:S6
S8	21	S7 NOT AD=20011126:20031126/PR
S9	19	S8 NOT AD=20031126:20060615/PR
S10	25	S4 AND S5:S6
S11	17	S10 NOT AD=20011126:20031126/PR
S12	14	S11 NOT AD=20031126:20060615/PR
S13	14	S12 NOT S9
S14	11	S3(3N) (PARTIAL?? OR INCOMPLETE?? OR UNCOMPLETE?? OR HALF OR
	H	ALFWAY)
S15	11	S14 NOT (S9 OR S13)
S16	9	S15 NOT AD=20011126:20031126/PR
S17	7	S16 NOT AD=20031126:20060615/PR

13/5/4 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015514715 \*\*Image available\*\*

WPI Acc No: 2003-576862/200354

XRPX Acc No: N03-458552

Unique authoritative electronic record creation method involves generating and prepending receipts to beginning of record and appending identifying information to end of record

Patent Assignee: AINSWORTH S G (AINS-I); HAWKINS C F (HAWK-I); PLASTER D J (PLAS-I)

Inventor: AINSWORTH S G; HAWKINS C F; PLASTER D J
Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20030093679 A1 20030515 US 2001993132 A 20011114 200354 B

Priority Applications (No Type Date): US 2001993132 A 20011114 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 20030093679 A1 21  $\rm H04L-009/00$ 

Abstract (Basic): US 20030093679 A1

NOVELTY - A receipt (7) that includes information relating to the **electronic** record (6) and identifying information (8) that includes a provable representation of the receipt, are generated. The **receipt** is **prepended** to the beginning of the record and the identifying information is appended to the ending of the record. The record is stored in the repository (5).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a method for creating and validating **digital** signatures for **electronic** authoritative **record** maintained in a secure environment;
- (2) a computer-readable medium for storing a program that allows a user to receive, and **digitally** sign a copy of **electronic** record that is stored in a remote location;
- (3) a method for digitally signing electronic record received from a secure environment;
- (4) an apparatus for creating and storing a unique authoritative record;
- (5) a system for obtaining a **digital signature** on an authoritative record stored in a secure environment;
- (6) a system for creating and validating **digital** signatures on an **electronic** authoritative **record**; and
  - (7) an apparatus for digitally signing an electronic record

USE - For security of **electronic records** in secure environment through computer systems especially for business applications.

ADVANTAGE - Ensures that copies made from a unique authoritative electronic record are easily distinguished as copies. Allows a person to electronically sign a record at a remote location without compromising the uniqueness of the record.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram explaining the generation of a **digital signature** at a remote location and transmission to the repository.

repository (5)

electronic record (6)

receipt (7)

identifying information (8)

## digital signature (11)

pp; 21 DwgNo 3/6

Title Terms: UNIQUE; ELECTRONIC; RECORD; CREATION; METHOD; GENERATE; RECEIPT; BEGIN; RECORD; IDENTIFY; INFORMATION; END; RECORD

Derwent Class: T01 International Patent Class (Main): H04L-009/00

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20/5/2
            (Item 2 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2006 The Thomson Corp. All rts. reserv.
014333926
             **Image available**
WPI Acc No: 2002-154629/200220
XRPX Acc No: N02-117592
   Digital
             signature system, has several remotely located
  computer-based systems coupled to document computer-based system over
  public data network
Patent Assignee: DOCUTOUCH CORP (DOCU-N); COCHRAN J M (COCH-I); GONSER T H
  (GONS-I); HAJMIRAGHA M (HAJM-I); LORENZINI C V (LORE-I); RANFT E C
  (RANF-I)
Inventor: COCHRAN J M; HAJMIRAGHA M; GONSER T H; LORENZINI C V; RANFT E C
Number of Countries: 096 Number of Patents: 005
Patent Family:
Patent No
             Kind
                     Date
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
                  20011227
WO 200199388
              A2
                             WO 2001US41108 A
                                                 20010621 200220
JP 2002023629 A
                   20020123
                             JP 200138965
                                             Α
                                                 20010215 200222
AU 200173624
                   20020102
                            AU 200173624
              Α
                                             Α
                                                 20010621 200230
US 20040225884 A1 20041111
                             US 2000213204
                                            Ρ
                                                  20000621 200475
                             US 2000705964
                                             Α
                                                 20001103
                             US 2003749814
                                             Α
                                                 20031230
AU 2001273624 A8 20050915 AU 2001273624
                                             Α
                                                 20010621
                                                           200569
Priority Applications (No Type Date): US 2000705964 A 20001103; US
  2000213204 P 20000621; US 2003749814 A 20031230
Patent Details:
Patent No Kind Lan Pg
                        Main IPC
                                     Filing Notes
WO 200199388 A2 E 23 H04L-009/32
   Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
   CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
   IS KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL
   PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
JP 2002023629 A
                   10 G09C-001/00
AU 200173624 A
                                     Based on patent WO 200199388
US 20040225884 A1
                       H04L-009/00
                                     Provisional application US 2000213204
```

CIP of application US 2000705964 AU 2001273624 A8 G06F-001/00 Based on patent WO 200199388

Abstract (Basic): WO 200199388 A2

NOVELTY - The system has several remotely located computer-based systems coupled to a document computer-based system over a public data network. The remotely located computer-based systems allow users at remote locations to sign and designate for signature blocks of text of a document that is securely stored at the document computer-based system.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM in included for a method various documents signing functions

USE - For digital signatures in documents

ADVANTAGE - Imparts initialing information in **digitally** signed **documents** in order to make digital signing process more like what is performed in paper versions

DESCRIPTION OF DRAWING(S) - The figure shows a system block diagram formed in accordance with the invention.

pp; 23 DwgNo 1/10

Title Terms: DIGITAL; SIGNATURE; SYSTEM; REMOTE; LOCATE; COMPUTER; BASED; SYSTEM; COUPLE; DOCUMENT; COMPUTER; BASED; SYSTEM; PUBLIC; DATA; NETWORK Derwent Class: T01

International Patent Class (Main): G06F-001/00; G09C-001/00; H04L-009/00;

H04L-009/32

International Patent Class (Additional): G06F-017/60; H04L-029/06

23/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013851835 \*\*Image available\*\*
WPI Acc No: 2001-336048/200136
Related WPI Acc No: 2001-336066

XRPX Acc No: N01-242570

Method in which client registration process establishes identity of client holding authorization code by using service provider that returns hash of document as reference which client will use to identify document

Patent Assignee: RDM CORP (RDMR-N); XIGN INC (XIGN-N)

Inventor: PAVLIK P

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week CA 2272723 A1 20001125 CA 2272723 Α 19990525 200136 B B1 20041019 US 2000577660 US 6807633 Α 20000525 200469

Priority Applications (No Type Date): CA 2272723 A 19990525 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

CA 2272723 A1 E 4 H04L-009/32 US 6807633 B1 H04L-009/00 Abstract (Basic): CA 2272723 A1

NOVELTY - **Electronic document** is submitted by client while template is maintained on file in database by service provider at the request of client and identified by agreed reference submitted by client. Service provider returns **hash** of the document as reference which the client will use when submitting requests to identify document and the service provider will recalculate **hash** on each request to verify the document selection.

USE - In distribution and management of digital certificates.

ADVANTAGE - The service provider could append a client's digital signature to an electronic document following the receipt of instructions and authorization from the client over a secure communications line and then provide the digitally signed document to the client.

DESCRIPTION OF DRAWING(S) - The drawing shows client-service provider interaction during establishing a secure connection. pp; 4 DwgNo 1/1

Title Terms: METHOD; CLIENT; REGISTER; PROCESS; ESTABLISH; IDENTIFY; CLIENT; HOLD; AUTHORISE; CODE; SERVICE; RETURN; HASH; DOCUMENT; REFERENCE; CLIENT; IDENTIFY; DOCUMENT

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00; H04L-009/32

23/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corp. All rts. reserv.

011656742 \*\*Image available\*\* WPI Acc No: 1998-073650/199807

XRPX Acc No: N98-059021

Digital signature document communication apparatus connected to e.g. data processor, data communication system used in network - has document reception side control device to receive document to be confirmed by using digital signature stored in document verification data control device and assumed to be formed on document itself

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ ) Number of Countries: 001 Number of Patents: 001 Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 9311854 A 19971202 JP 96127360 A 19960522 199807 B

Priority Applications (No Type Date): JP 96127360 A 19960522 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 9311854 A 14 G06F-017/21

Abstract (Basic): JP 9311854 A

The apparatus includes a document side transmission device (1) to transmit the **digital signature**, formed on a document, to a document verification data control device (3). The document is gathered by a document reception side device (2). The document is verified by using the **digital signature** stored in the verification data control device.

When the document verification data control device searches for the digital signature, it uses a related index. The message digest for digital signature production is used as the index. The document verification data control device can also store the document aside from the digital signature.

USE - Also for file in file system.

ADVANTAGE - Determines authentication or alteration of file. Does not use large capacity data memory. Provides warranty function for document. Enables efficient search of **digital signature**. Allows referral of stored document to verified document. Enables reduction of data sent to reception side apparatus from document transmission side apparatus. Can store key data for decoding of encrypted document.

Dwg.1/22

Title Terms: DIGITAL; SIGNATURE; DOCUMENT; COMMUNICATE; APPARATUS; CONNECT; DATA; PROCESSOR; DATA; COMMUNICATE; SYSTEM; NETWORK; DOCUMENT; RECEPTION; SIDE; CONTROL; DEVICE; RECEIVE; DOCUMENT; DIGITAL; SIGNATURE; STORAGE; DOCUMENT; VERIFICATION; DATA; CONTROL; DEVICE; ASSUME; FORMING; DOCUMENT Derwent Class: P85; T01; W01

International Patent Class (Main): G06F-017/21

International Patent Class (Additional): G06F-012/00; G09C-001/00; H04L-009/32

File Segment: EPI; EngPI

23/5/5 (Item 5 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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008953086 \*\*Image available\*\*
WPI Acc No: 1992-080355/199210
XRPX Acc No: N92-060198

Secure time stamping method for digital documents - transmits document to stamping authority to add time data to form receipt and applies cryptographic signature before returning to author

Patent Assignee: HABER S A (HABE-I); STORNETTA W S (STOR-I); BELL COMMUNICATIONS RES INC (BELL-N); BELL COMMUNICATIONS RES (BELL-N); BELL COMMUNICATIONS RES (BELL-N); TELCORDIA TECHNOLOGIES INC (TELC-N)

Inventor: HABER S A; STORNETTA W S; STORNETTA W Number of Countries: 017 Number of Patents: 014

Pa	Patent Family:										
Patent No		Kind	Date	Ap	plicat No	Kind	Date	Week			
WO	9203000	Α	19920220		-			199210	В		
US	5136646	Α	19920804	US	91666896	Α	19910308	199234			
	5136647	Α	19920804	US	90561888	Α	19900802	199234			
ΕP	541727	A1	19930519	EΡ	91917680	Α	19910730	199320			
				WO	91US5386	Α	19910730				
JΡ	6501571	W	19940217	JP	91516026	Α	19910730	199412			
				WO	91US5386	Α	19910730				
US	34954	E	19950530	US	90561888	Α	19900802	199527			
				US	93156120	Α	19931122				
	541727	A4	19951025	EΡ	91917680	Α		199620			
	2088371	С	19980811	CA	2088371	Α	19910730	199843			
ΕP	541727	B1	19991117	EΡ	91917680	Α	19910730	199953			
				ŴΟ	91US5386	Α	19910730				
DE	69131789	E	19991223	DE	631789	Α	19910730	200006			
				ΕP	91917680	Α	19910730				
				WO	91US5386	Α	19910730				
	2142307	Т3	20000416	EΡ	91917680	Α	19910730	200026			
JР	3278721	В2	20020430	JΡ	91516026	Α	19910730	200230			
				WO	91US5386	Α	19910730				
JР	3281881	В2	20020513	JP	91516026	Α	19910730	200234			
				JΡ	2001204357	Α	19910730				
JΡ	2002092220	Α	20020329	JP	91516026	Α	19910730	200238			
				JP	2001204357	Α	19910730				

Priority Applications (No Type Date): US 91666896 A 19910308; US 90561888 A 19900802; US 93156120 A 19931122

Cited Patents: US 4145568; US 4206315; 2.Jnl.Ref

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9203000 A 34

Designated States (National): CA JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL SE

Reissue of patent US 5136647

US 5136646 A 8 H04L-009/00 US 5136647 A 10 H04L-009/00

US 5136647 A 10 H04L-009/00 EP 541727 A1 E 34 H04L-009/00 Based on patent WO 9203000

Designated States (Regional): BE CH DE ES FR GB IT LI NL SE JP 6501571 W 34 G09C-001/00 Based on patent WO 9203000

US 34954 E 10 H04L-009/00 CA 2088371 C H04L-009/00

EP 541727 B1 E H04L-009/00 Based on patent WO 9203000

Designated States (Regional): BE CH DE ES FR GB IT LI NL SE DE 69131789 E H04L-009/00 Based on patent EP 541727

ES 2142307 T3 H04L-009/00 Based on patent EP 541727

 JP 3278721
 B2
 14 G09C-001/00
 Previous Publ. patent JP 6501571

 Based on patent WO 9203000
 Div ex application JP 91516026

 JP 3281881
 B2
 14 G09C-001/00
 Div ex application JP 91516026

 JP 2002092220
 A
 13 G06F-017/60
 Div ex application JP 91516026

Abstract (Basic): WO 9203000 A

A digital representation of the document is transmitted from an originator to an outside agency. The outside agency creates a receipt comprising a digital representation of then current time, and at least a portion of a digital representation of the document. The receipt is certified at the outside agency by means of a varifiable digital cryptographic signature scheme. The temporal sequence of digital documents in a series is also clarified.

ADVANTAGE - Reliable method of  $\mbox{\bf document}$  verification for  $\mbox{\bf e}$  .g. intellectual property uses.

Dwg.1/5

Title Terms: SECURE; TIME; STAMP; METHOD; DIGITAL; DOCUMENT; TRANSMIT; DOCUMENT; STAMP; AUTHORISE; ADD; TIME; DATA; FORM; RECEIPT; APPLY; CRYPTOGRAPHIC; SIGNATURE; RETURN

Derwent Class: P85; T01; W01

International Patent Class (Main): G06F-017/60; G09C-001/00; H04L-009/00

International Patent Class (Additional): H04L-009/30; H04L-009/32

File Segment: EPI; EngPI

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27/5/6
           (Item 6 from file: 350)
DIALOG(R) File 350: Derwent WPIX
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013084895
             **Image available**
WPI Acc No: 2000-256767/200022
XRPX Acc No: N00-190923
  System for securely associating signature data other data for
  authenticating or digitally signing
                                         digital data objects, uses a
  hashing routine to generate an irreversible, distinct data object from
  the digital data and signature
Patent Assignee: BORGERS F J (BORG-I)
Inventor: BORGERS F J
Number of Countries: 025 Number of Patents: 001
Patent Family:
Patent No
              Kind
                     Date
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
WO 200013368 A1 20000309 WO 99US18824
                                            Α
                                                 19990827
                                                           200022 B
Priority Applications (No Type Date): US 98144043 A 19980831
Patent Details:
Patent No Kind Lan Pg
                         Main IPC
                                     Filing Notes
WO 200013368 A1 E 23 H04L-009/32
   Designated States (National): CA IL IN JP KR MX SG
   Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU
   MC NL PT SE
Abstract (Basic): WO 200013368 A1
        NOVELTY - A first data object supplied by the user (11) is combined
    with signature or authentication data (13), the combined data object
    and signature is encrypted (15) before being digested (or hashed )
    (17) to generate a distinct data object characteristic of the input
    data. In an authentication process, a copy of the data object and
    signature or authentication data is subject to the same process and the
    generated distinct data object is compared with the original.
        USE - For use in providing authentication of digital data, such
    as document or other data files or objects, particularly for securely
    appending or incorporating a digital
                                            signature or indicia of
    authenticity into a data object.
        ADVANTAGE - Because the hashing or digesting step is one-way or
    irreversible, the encrypted portion of the signature is not susceptible
    to unauthorized decryption.
        DESCRIPTION OF DRAWING(S) - The figure is a high level flow chart
    depicting the steps for providing a data object with authentication or
    signature data.
        User (11)
       Authentication data (13)
        Encryption (15)
       Digest hash to form distinct data object (17)
       pp; 23 DwgNo 1/4
Title Terms: SYSTEM; SECURE ; ASSOCIATE; SIGNATURE; DATA; DATA;
  AUTHENTICITY; DIGITAL; SIGN; DIGITAL; DATA; OBJECT; HASH; ROUTINE;
  GENERATE; IRREVERSIBLE; DISTINCT; DATA; OBJECT; DIGITAL; DATA; SIGNATURE
Derwent Class: W01
International Patent Class (Main): H04L-009/32
File Segment: EPI
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31/5/4 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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017470070 \*\*Image available\*\*
WPI Acc No: 2005-793749/200581

XRPX Acc No: N05-657451

Time stamping method for digital documents, involves certifying time stamping receipt containing identifying data and time difference, by signing receipt with time-based private signature key as provided by time stamping authority

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )
Inventor: MATYAS S M; PEYRAVIAN M; ROGINSKY A; ZUNIC N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 6965998 B1 20051115 US 99459187 A 19991210 200581 B

Priority Applications (No Type Date): US 99459187 A 19991210

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6965998 B1 5 H04L-009/00

Abstract (Basic): US 6965998 B1

NOVELTY - The document to-be-certified associated with identifying data is received and time difference between time reference and time receipt of identifying data as computed by time stamping authority (TSA), is added to the document to obtain time stamping receipts. The time stamping receipts is signed using time based private signature key provided by the TSA at that predetermined time reference.

USE - Used for time stamping of  ${\tt digital}$   ${\tt documents}$  to  ${\tt sign}$  stamping by time-based private signature key provided by time stamping authority.

ADVANTAGE - Improves security as the efforts to modify a document or tampering can be easily detected.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram of the time stamping protocol method.

pp; 5 DwgNo 1/1

Title Terms: TIME; STAMP; METHOD; DIGITAL; DOCUMENT; CERTIFY; TIME; STAMP; RECEIPT; CONTAIN; IDENTIFY; DATA; TIME; DIFFER; SIGN; RECEIPT; TIME; BASED; PRIVATE; SIGNATURE; KEY; TIME; STAMP; AUTHORISE

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00

International Patent Class (Additional): H04K-001/00

(Item 6 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2006 The Thomson Corp. All rts. reserv. 014309933 \*\*Image available\*\* WPI Acc No: 2002-130636/200217 XRPX Acc No: N02-098539 Electronic document recording method for government licensing applications, involves signing receipt by recorder after which electronic document is imaged and indexed Patent Assignee: INGEO SYSTEMS INC (INGE-N); RASMUSSEN A L (RASM-I); SLATER C N (SLAT-I) Inventor: RASMUSSEN A L; SLATER C N Number of Countries: 096 Number of Patents: 004 Patent Family: Patent No Applicat No Kind Date Kind Date Week 20011213 20010606 200217 WO 200195125 A1 WO 2001US18305 A AU 200166736 Α 20011217 AU 200166736 Α 20010606 200225 US 20020069179 A1 20020606 US 2000210180 Р 20000606 200241 US 2001875579 20010606 Α US 6796489 B2 20040928 US 2000210180 Ρ 20000606 200464 US 2001875579 Α 20010606 Priority Applications (No Type Date): US 2001875579 A 20010606; US 2000210180 P 20000606 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes WO 200195125 A1 E 54 G06F-015/00 Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW AU 200166736 A G06F-015/00 Based on patent WO 200195125 US 20020069179 A1 G06F-017/60 Provisional application US 2000210180 US 6796489 B2 G06F-017/60 Provisional application US 2000210180 Abstract (Basic): WO 200195125 A1 NOVELTY - The number of pages in a validated electronic , is determined for charging fee. Endorsement data is inserted in an endorsement portion of the electronic document . A recorder signature block is added to the electronic document , if it is not present. A receipt generated for recordation is signed by the recorder, after which the electronic document is imaged and

indexed.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Computer program product containing instruction for electronic document recording;
  - (b) Electronic document verifying method;
- (c) Computer program product for electronic document verification;
- (d) Signature module for embedding digital signatures in electronic document

USE - For processing electronic documents e .g. XML document such that the notary signatures are validated, for government licensing applications such as business licenses, vehicle licenses, hunting and fishing licenses and documents filed with courts, securities exchange

commission, etc., and real estate transaction, security interest and loan agreement, medical records, pharmaceutical application.

ADVANTAGE - By embedding **digital** signatures in the **electronic document**, verification is performed efficiently.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of an  ${f electronic}$  document .

pp; 54 DwgNo 2A/6

Title Terms: ELECTRONIC; DOCUMENT; RECORD; METHOD; GOVERN; APPLY; SIGN; RECEIPT; RECORD; AFTER; ELECTRONIC; DOCUMENT; IMAGE; INDEX

Derwent Class: T01

International Patent Class (Main): G06F-015/00; G06F-017/60

31/5/11 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014185297 \*\*Image available\*\* WPI Acc No: 2002-005994/200201

XRPX Acc No: N02-005084

Preservation method of electronic document transmitted through internet, involves collecting log corresponding to electronic document to which digital signature is added

Patent Assignee: HITACHI LTD (HITA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2001282624 A 20011012 JP 2000101217 A 20000331 200201 B

Priority Applications (No Type Date): JP 2000101217 A 20000331 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes JP 2001282624 A 4 G06F-012/14

Abstract (Basic): JP 2001282624 A

NOVELTY - A log (7) containing the receipt time of an electronic document is added to the document. The log corresponding to the electronic document is collected and a digital signature is added to the document which is then stored in a memory as original electronic document.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for original preservation system for  ${f electronic}$  document .

USE - For preserving original **electronic document** transmitted through internet.

ADVANTAGE - The denial from the transmission side can be prevented, since original document is identified based on the existence of  ${f digital}$  signature .

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the original preservation system. (Drawing includes non-English language text).

Log (7)

pp; 4 DwgNo 1/3

Title Terms: PRESERVE; METHOD; ELECTRONIC; DOCUMENT; TRANSMIT; THROUGH; COLLECT; LOG; CORRESPOND; ELECTRONIC; DOCUMENT; DIGITAL; SIGNATURE; ADD

Derwent Class: P85; T01

International Patent Class (Main): G06F-012/14

International Patent Class (Additional): G09C-001/00

File Segment: EPI; EngPI